

**AMENDMENTS TO THE CLAIMS**

Claims previously submitted:

1. (Canceled)
2. (Canceled)
3. (Canceled)
4. (Canceled)
5. (Canceled)
6. (Canceled)
7. (Canceled)
8. (Canceled)
9. (Canceled)
10. (Canceled)
11. (Canceled)
12. (Canceled)
13. (Canceled)
14. (Canceled)
15. (Canceled)
16. (Canceled)
17. (Canceled)
18. (Canceled)
19. (Canceled)

20. (Canceled)
21. (Canceled)
22. (Canceled)
23. (Canceled)
24. (Canceled)
25. (Canceled)
26. (Canceled)
27. (Canceled)
28. (Canceled)
29. (Canceled)
30. (Canceled)
31. (Canceled)
32. (Canceled)
33. (Canceled)
34. (Canceled)
35. (Canceled)
36. (Canceled)
37. (Canceled)
38. (Canceled)
39. (Canceled)
40. (Canceled)

41. (Canceled)
42. (Canceled)
43. (Previously presented) A fossil fuel additive comprising;  
  
a plant oil extract selected from the group consisting of hops oil extract, fescue oil extract, barley oil extract, green clover oil extract, wheat oil extract and mixtures thereof;  
  
a carotenoid; and  
  
a thermalstabilizer.
44. (Previously presented) The additive of claim 43 wherein the carotenoid is selected from the group consisting of  $\beta$ -carotene,  $\alpha$ -carotene, lycopene, leutin, betatene and mixtures there of.
45. (Previously presented) The additive of claim 43, wherein the thermal stabilizer is selected from the group consisting of vegetable oils, nut oils, animal oils and mixtures thereof
46. (Previously presented) The additive of claim 43 wherein the plant oil extract is derived from barley and the carotenoid is  $\beta$ -carotene.
47. (Previously presented) The additive of claim 43 wherein the thermal stabilizer is meadowfoam oil.
48. (Previously presented) The additive of claim 43 further comprising a diluent.
49. (Previously presented) The additive of claim 43 further comprising a solvent selected from the group consisting of toluene, benzene, o-xylene, m-xylene, p-xylene, cyclohexanes, hexane, octanes, nonanes, fossil fuel, fossil fuel, fossil fuel, 2 cycle oil, resid fuel and mixtures thereof.

50. (Previously presented) The additive of claim 43 further comprising at least one additive selected from the group selected from octane improvers, cetane improvers, detergents, corrosion inhibitors, metal deactivators, ignition accelerators, dispersants, anti-knock additives, anti-run-on additives, anti-pre-ignition additives, anti-misfire additives, anti-wear additives, antioxidants, demulsifiers, carrier fluids, solvents, fuel economy additives, emission reduction additives, lubricity improvers, oxygenates and mixtures thereof.
51. (Canceled)
52. (Previously presented) A fossil fuel comprising a base fuel and at least one additive wherein the additive comprises:
- a plant oil extract derived from grain;
  - a carotenoid; and
  - a thermal stabilizer.
53. (Previously presented) The fossil fuel of claim 52, wherein the grain is selected from the group consisting of fescue, clover, wheat, barley, oats, rye, sorghum, flax, triticale, rice, corn, spelt, millet, amaranth, buckwheat, quinoa, kamut and teff.
54. (Previously presented) The fossil fuel of claim 52 wherein the carotenoid is selected from the group consisting of  $\beta$ -carotene,  $\alpha$ -carotene, lycopene, leutin, betatene and mixtures thereof.
55. (Previously presented) The fossil fuel of claim 52, wherein the thermal stabilizer is selected from the group consisting of vegetable oils, nut oils, animal oils and mixtures thereof.

56. (Previously presented) The fossil fuel of claim 52 wherein the plant oil extract is derived from barley and the carotenoid is  $\beta$ -carotene.
57. (Previously presented) The fossil fuel of claim 52 wherein the thermal stabilizer is meadowfoam oil.
58. (Previously presented) The fossil fuel of claim 52 further comprising a diluent.
59. (Previously presented) The fossil fuel of claim 52 further comprising a solvent selected from the group consisting of toluene, benzene, o-xylene, m-xylene, p-xylene, cyclohexanes, hexane, octanes, nonanes, fossil fuel, fossil fuel, fossil fuel, 2 cycle oil and resid fuel and mixtures thereof.
60. (Previously presented) The fossil fuel of claim 52 further comprising at least one additive selected from the group selected from octane improvers, cetane improvers, detergents, corrosion inhibitors, metal deactivators, ignition accelerators, dispersants, anti-knock additives, anti-run-on additives, anti-pre-ignition additives, anti-misfire additives, anti-wear additives, antioxidants, demulsifiers, carrier fluids, solvents, fuel economy additives, emission reduction additives, lubricity improvers, oxygenates and mixtures thereof.
61. (Canceled)
62. (Previously presented) A fossil fuel comprising a base fuel and at least one additive wherein the additive comprises:
  - a hydrophobic plant oil extract;
  - a carotenoid; and

a thermal stabilizer selected from the group consisting of peanut oil, cottonseed oil, rape seed oil, macadamia oil, avocado oil, palm oil, palm kernel oil, meadowfoam oil and mixtures thereof.

63. (Previously presented) The fossil fuel of claim 62 wherein the plant oil extract is derived from a member of the Leguminosae family.
64. (Previously presented) The fossil fuel of claim 62 wherein the plant oil extract is derived from grain.
65. (Previously presented) The fossil fuel of claim 62 further comprising a diluent.
66. (Previously presented) The fossil fuel of claim 62 further comprising a solvent selected from the group consisting of toluene, benzene, o-xylene, m-xylene, p-xylene, cyclohexanes, hexane, octanes, nonanes, fossil fuel, fossil fuel, fossil fuel, 2 cycle oil and resid fuel and mixtures thereof.
67. (Previously presented) The fossil fuel of claim 62 further comprising at least one additive selected from the group selected from octane improvers, cetane improvers, detergents, corrosion inhibitors, metal deactivators, ignition accelerators, dispersants, anti-knock additives, anti-run-on additives, anti-pre-ignition additives, anti-misfire additives, anti-wear additives, antioxidants, demulsifiers, carrier fluids, solvents, fuel economy additives, emission reduction additives, lubricity improvers, oxygenates and mixtures thereof.
68. (Previously presented) The fossil fuel of claim 62, wherein the carotenoid is selected from the group consisting of  $\beta$ -carotene,  $\alpha$ -carotene, lycopene, leutin, betatene and mixtures thereof.

69. (Previously presented) The fossil fuel of claim 62 wherein the plant oil extract is barley oil extract, the carotenoid is  $\beta$ -carotene.
70. (Previously presented) A fossil fuel comprising a base feed and at least one additive wherein the additive comprises:
- a plant oil extract selected from the group consisting of hops oil extract, fescue oil extract, barley oil extract, green clover oil extract, wheat oil extract and mixtures thereof;
- a carotenoid; and
- a thermal stabilizer.
71. (Previously presented) The fossil fuel of claim 70 wherein the carotenoid is selected from the group consisting of  $\beta$ -carotene,  $\alpha$ -carotene, lycopene, leutin, betatene and mixtures thereof.
72. (Previously presented) The fossil fuel of claim 70, wherein the thermal stabilizer is selected from the group consisting of vegetable oils, nut oils, animal oils and mixtures thereof.
73. (Previously presented) The fossil fuel of claim 70 wherein the plant oil extract is derived from barley and the carotenoid is  $\beta$ -carotene.
74. (Previously presented) The fossil fuel of claim 70 wherein the thermal stabilizer is meadowfoam oil.
75. (Previously presented) The fossil fuel of claim 70 further comprising a diluent.
76. (Previously presented) The fossil fuel of claim 70 further comprising a solvent selected from the group consisting of toluene, benzene, o-xylene, m-xylene, p-xylene, cyclohexanes, hexane,

octanes, nonanes, fossil fuel, fossil fuel, fossil fuel, 2 cycle oil and resid fuel and mixtures thereof.

77. (Previously presented) The fossil fuel of claim 76 further comprising at least one additive selected from the group selected from octane improvers, cetane improvers, detergents, corrosion inhibitors, metal deactivators, ignition accelerators, dispersants, anti-knock additives, anti-run-on additives, anti-pre-ignition additives, anti-misfire additives, anti-wear additives, antioxidants, demulsifiers, carrier fluids, solvents, fuel economy additives, emission reduction additives, lubricity improvers, oxygenates and mixtures thereof.
78. (Canceled)
79. (New) A fossil fuel additive comprising:  
a plant oil extract derived from barley;  
 $\beta$ -carotene; and  
a thermal stabilizer.
80. The additive of claim 79 wherein the thermal stabilizer is meadowfoam oil.
81. (New) The additive of claim 79 further comprising a diluent.
82. (New) The additive of claim 79 further comprising a solvent selected from the group consisting of toluene, benzene, o-xylene, m-xylene, p-xylene, cyclohexanes, hexane, octanes, nonanes, fossil fuel, fossil fuel, fossil fuel, 2 cycle oil, resid fuel and mixtures thereof.
83. (New) A fossil fuel additive comprising:  
a hydrophobic plant oil extract;  
a carotenoid;  
a thermal stabilizer selected from the group consisting of peanut



oil, cottonseed oil, rape seed oil, macadamia oil, avocado oil, palm oil, palm kernel oil, meadowfoam oil and mixtures thereof; and a solvent selected from the group consisting of toluene, benzene, o-xylene, m-xylene, p-xylene, cyclohexanes, hexane, octanes, nonanes, fossil fuel, fossil fuel, fossil fuel, 2 cycle oil, resid fuel and mixtures thereof.

84. (New) The additive of claim 83 wherein the plant oil extract is barley oil extract, and the carotenoid is  $\beta$ -carotene.
85. (New) The additive of claim 83 further comprising meadowfoam oil.